

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 09/833,245B

Source: 1 Fw/16

Date Processed by STIC: 9/12/05

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 09/12/2005

PATENT APPLICATION: US/09/833,245B

TIME: 10:31:21

Input Set : N:\DA\pto.da.txt

Output Set: N:\CRF4\09122005\I833245B.raw

4 <110> APPLICANT: Human Genome Sciences, Inc.  
 6 <120> TITLE OF INVENTION: Albumin Fusion Proteins  
 8 <130> FILE REFERENCE: PF546  
 10 <140> CURRENT APPLICATION NUMBER: 09/833,245B  
 11 <141> CURRENT FILING DATE: 2001-04-12  
 13 <160> NUMBER OF SEQ ID NOS: 2279  
 15 <170> SOFTWARE: PatentIn Ver. 2.1  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 23  
 19 <212> TYPE: DNA  
 20 <213> ORGANISM: Artificial Sequence  
 22 <220> FEATURE:  
 23 <221> NAME/KEY: primer\_bind  
 24 <223> OTHER INFORMATION: primer useful to clone human growth hormone cDNA  
 26 <400> SEQUENCE: 1  
 27 cccaagaatt cccttatcca ggc 23  
 30 <210> SEQ ID NO: 2  
 31 <211> LENGTH: 33  
 32 <212> TYPE: DNA  
 33 <213> ORGANISM: Artificial Sequence  
 35 <220> FEATURE:  
 36 <221> NAME/KEY: primer\_bind  
 37 <223> OTHER INFORMATION: primer useful to clone human growth hormone cDNA  
 39 <400> SEQUENCE: 2  
 40 gggaagctta gaagccacag gatccctcca cag 33  
 43 <210> SEQ ID NO: 3  
 44 <211> LENGTH: 16  
 45 <212> TYPE: DNA  
 46 <213> ORGANISM: Artificial Sequence  
 48 <220> FEATURE:  
 49 <221> NAME/KEY: misc\_structure  
 50 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments  
 51 with non-cohesive ends.  
 53 <400> SEQUENCE: 3  
 54 gataaagatt cccaac 16  
 57 <210> SEQ ID NO: 4  
 58 <211> LENGTH: 17  
 59 <212> TYPE: DNA  
 60 <213> ORGANISM: Artificial Sequence  
 62 <220> FEATURE:  
 63 <221> NAME/KEY: misc\_structure  
 64 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments  
 65 with non-cohesive ends.

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67 <400> SEQUENCE: 4
68 aattgttggg aatcttt 17
71 <210> SEQ ID NO: 5
72 <211> LENGTH: 17
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <221> NAME/KEY: misc_structure
78 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments
79 with non-cohesive ends.
81 <400> SEQUENCE: 5
82 ttaggcttat tcccaac 17
85 <210> SEQ ID NO: 6
86 <211> LENGTH: 18
87 <212> TYPE: DNA
88 <213> ORGANISM: Artificial Sequence
90 <220> FEATURE:
91 <221> NAME/KEY: misc_structure
92 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA fragments
93 with non-cohesive ends.
95 <400> SEQUENCE: 6
96 aattgttggg aataagcc 18
99 <210> SEQ ID NO: 7
100 <211> LENGTH: 24
101 <212> TYPE: PRT
102 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <221> NAME/KEY: SITE
106 <222> LOCATION: 1)..(19)
107 <223> OTHER INFORMATION: invertase leader sequence
109 <220> FEATURE:
110 <221> NAME/KEY: SITE
111 <222> LOCATION: 20)..(24)
112 <223> OTHER INFORMATION: first 5 amino acids of mature human serum albumin
114 <400> SEQUENCE: 7
115 Met Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys
116 1 5 10 15
118 Ile Ser Ala Asp Ala His Lys Ser
119 20
122 <210> SEQ ID NO: 8
123 <211> LENGTH: 21
124 <212> TYPE: DNA
125 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:
128 <221> NAME/KEY: misc_structure
129 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
130 fragments with non-cohesive ends.
132 <400> SEQUENCE: 8
133 gagatgcaca cctgagtgag g 21

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Input Set : N:\DA\pto.da.txt

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136 <210> SEQ ID NO: 9
137 <211> LENGTH: 27
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <221> NAME/KEY: misc_structure
143 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
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146 <400> SEQUENCE: 9
147 gatcctgtgg cttcgatgca cacaaga                27
150 <210> SEQ ID NO: 10
151 <211> LENGTH: 24
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <221> NAME/KEY: misc_structure
157 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
158     fragments with non-cohesive ends.
160 <400> SEQUENCE: 10
161 ctcttggtg catcgaagcc acag                    24
164 <210> SEQ ID NO: 11
165 <211> LENGTH: 30
166 <212> TYPE: DNA
167 <213> ORGANISM: Artificial Sequence
169 <220> FEATURE:
170 <221> NAME/KEY: misc_structure
171 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
172     fragments with non-cohesive ends.
174 <400> SEQUENCE: 11
175 tgtggaagag cctcagaatt tattcccaac            30
178 <210> SEQ ID NO: 12
179 <211> LENGTH: 31
180 <212> TYPE: DNA
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <221> NAME/KEY: misc_structure
185 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
186     fragments with non-cohesive ends.
188 <400> SEQUENCE: 12
189 aattgttggg aataaattct gaggctcttc c          31
192 <210> SEQ ID NO: 13
193 <211> LENGTH: 47
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <221> NAME/KEY: misc_structure
199 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
200     fragments with non-cohesive ends.
202 <400> SEQUENCE: 13

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203 ttaggcttag gtggcggtgg atccggcggt ggtggatctt tcccaac 47
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207 <211> LENGTH: 48
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <221> NAME/KEY: misc_structure
213 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
214     fragments with non-cohesive ends.
216 <400> SEQUENCE: 14
217 aattgttggg aaagatccac caccgccgga tccaccgcca cctaagcc 48
220 <210> SEQ ID NO: 15
221 <211> LENGTH: 62
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:
226 <221> NAME/KEY: misc_structure
227 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
228     fragments with non-cohesive ends.
230 <400> SEQUENCE: 15
231 ttaggcttag gcggtggtgg atctggtggc ggcggatctg gtggcggtgg atccttccca 60
233 ac 62
236 <210> SEQ ID NO: 16
237 <211> LENGTH: 63
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <221> NAME/KEY: misc_structure
243 <223> OTHER INFORMATION: synthetic oligonucleotide used to join DNA
244     fragments with non-cohesive ends.
246 <400> SEQUENCE: 16
247 aattgttggg aaggatccac cgccaccaga tccgccgcca ccagatccac caccgcctaa 60
249 gcc 63
252 <210> SEQ ID NO: 17
253 <211> LENGTH: 1782
254 <212> TYPE: DNA
255 <213> ORGANISM: Homo sapiens
257 <220> FEATURE:
258 <221> NAME/KEY: CDS
259 <222> LOCATION: (1)..(1755)
262 <400> SEQUENCE: 17
263 gat gca cac aag agt gag gtt gct cat cgg ttt aaa gat ttg gga gaa 48
264 Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
265 1 5 10 15
267 gaa aat ttc aaa gcc ttg gtg ttg att gcc ttt gct cag tat ctt cag 96
268 Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
269 20 25 30
271 cag tgt cca ttt gaa gat cat gta aaa tta gtg aat gaa gta act gaa 144
272 Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu

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273	35	40	45	
275	ttt gca aaa aca tgt gtt gct gat gag tca gct gaa aat tgt gac aaa	192		
276	Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys			
277	50 55 60			
279	tca ctt cat acc ctt ttt gga gac aaa tta tgc aca gtt gca act ctt	240		
280	Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu			
281	65 70 75 80			
283	cgt gaa acc tat ggt gaa atg gct gac tgc tgt gca aaa caa gaa cct	288		
284	Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro			
285	85 90 95			
287	gag aga aat gaa tgc ttc ttg caa cac aaa gat gac aac cca aac ctc	336		
288	Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu			
289	100 105 110			
291	ccc cga ttg gtg aga cca gag gtt gat gtg atg tgc act gct ttt cat	384		
292	Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His			
293	115 120 125			
295	gac aat gaa gag aca ttt ttg aaa aaa tac tta tat gaa att gcc aga	432		
296	Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg			
297	130 135 140			
299	aga cat cct tac ttt tat gcc ccg gaa ctc ctt ttc ttt gct aaa agg	480		
300	Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg			
301	145 150 155 160			
303	tat aaa gct gct ttt aca gaa tgt tgc caa gct gct gat aaa gct gcc	528		
304	Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala			
305	165 170 175			
307	tgc ctg ttg cca aag ctc gat gaa ctt cgg gat gaa ggg aag gct tcg	576		
308	Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser			
309	180 185 190			
311	tct gcc aaa cag aga ctc aaa tgt gcc agt ctc caa aaa ttt gga gaa	624		
312	Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu			
313	195 200 205			
315	aga gct ttc aaa gca tgg gca gtg gct cgc ctg agc cag aga ttt ccc	672		
316	Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro			
317	210 215 220			
319	aaa gct gag ttt gca gaa gtt tcc aag tta gtg aca gat ctt acc aaa	720		
320	Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys			
321	225 230 235 240			
323	gtc cac acg gaa tgc tgc cat gga gat ctg ctt gaa tgt gct gat gac	768		
324	Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp			
325	245 250 255			
327	agg gcg gac ctt gcc aag tat atc tgt gaa aat cag gat tcg atc tcc	816		
328	Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser			
329	260 265 270			
331	agt aaa ctg aag gaa tgc tgt gaa aaa cct ctg ttg gaa aaa tcc cac	864		
332	Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His			
333	275 280 285			
335	tgc att gcc gaa gtg gaa aat gat gag atg cct gct gac ttg cct tca	912		
336	Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser			
337	290 295 300			

**RAW SEQUENCE LISTING ERROR SUMMARY**  
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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:25; N Pos. 18,19,20,21,22,23,24,25,26,27,28,29,30,31,32  
Seq#:26; N Pos. 37,38,39,40,41,42,43,44,45,46,47,48,49,50,51  
Seq#:27; N Pos. 19,20,21,22,23,24,25,26,27,28,29,30,31,32,33  
Seq#:28; N Pos. 38,39,40,41,42,43,44,45,46,47,48,49,50,51,52  
Seq#:32; N Pos. 29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46  
Seq#:33; N Pos. 38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55  
Seq#:74; Xaa Pos. 24  
Seq#:76; Xaa Pos. 5  
Seq#:77; Xaa Pos. 29,34,37  
Seq#:78; Xaa Pos. 3,17,33  
Seq#:82; Xaa Pos. 196,224,233  
Seq#:83; Xaa Pos. 60,73,75,82  
Seq#:86; Xaa Pos. 26  
Seq#:87; Xaa Pos. 50  
Seq#:89; Xaa Pos. 41  
Seq#:91; Xaa Pos. 13  
Seq#:95; Xaa Pos. 12,38,43,145  
Seq#:99; Xaa Pos. 260  
Seq#:101; Xaa Pos. 259,262,280  
Seq#:104; Xaa Pos. 42,49,69,76  
Seq#:115; Xaa Pos. 12,49,51  
Seq#:124; Xaa Pos. 7,22,24,111  
Seq#:125; Xaa Pos. 81,84  
Seq#:127; Xaa Pos. 1,19,81  
Seq#:131; Xaa Pos. 142  
Seq#:137; Xaa Pos. 42  
Seq#:146; Xaa Pos. 131,185,218,220,250,312  
Seq#:154; Xaa Pos. 91,93,99  
Seq#:158; Xaa Pos. 36  
Seq#:159; Xaa Pos. 10,19  
Seq#:163; Xaa Pos. 2,6,14,34,51  
Seq#:169; Xaa Pos. 6,13,51  
Seq#:170; Xaa Pos. 33,129  
Seq#:175; Xaa Pos. 44,57  
Seq#:176; Xaa Pos. 26  
Seq#:180; Xaa Pos. 71  
Seq#:181; Xaa Pos. 1,5,8  
Seq#:189; Xaa Pos. 21  
Seq#:190; Xaa Pos. 15,30,32,187  
Seq#:195; Xaa Pos. 3,17  
Seq#:196; Xaa Pos. 26,28  
Seq#:197; Xaa Pos. 2  
Seq#:198; Xaa Pos. 27  
Seq#:200; Xaa Pos. 8,12,16,18,19,23

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Seq#:204; Xaa Pos. 9,21  
Seq#:211; Xaa Pos. 79,321  
Seq#:215; Xaa Pos. 8,11,18,61  
Seq#:216; Xaa Pos. 8,11,18,61  
Seq#:223; Xaa Pos. 36,37  
Seq#:228; Xaa Pos. 98  
Seq#:234; Xaa Pos. 15

**Invalid Line Length:**

**The rules require that a line not exceed 72 characters in length. This includes spaces.**

Seq#:2270; Line(s) 91695  
Seq#:2271; Line(s) 91709  
Seq#:2276; Line(s) 91778



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Input Set : N:\DA\pto.da.txt

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L:701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0  
 L:791 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
 L:880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
 L:970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
 L:1176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0  
 L:1280 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
 L:1847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:16  
 L:1901 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0  
 L:1945 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77 after pos.:16  
 M:341 Repeated in SeqNo=77  
 L:1980 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:0  
 M:341 Repeated in SeqNo=78  
 L:2297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:192  
 M:341 Repeated in SeqNo=82  
 L:2349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:48  
 M:341 Repeated in SeqNo=83  
 L:2459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:16  
 L:2490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:48  
 L:2550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:32  
 L:2589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:0  
 L:2686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:0  
 M:341 Repeated in SeqNo=95  
 L:2816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:256  
 L:2985 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:256  
 M:341 Repeated in SeqNo=101  
 L:3191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:104 after pos.:32  
 M:341 Repeated in SeqNo=104  
 L:3507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115 after pos.:0  
 M:341 Repeated in SeqNo=115  
 L:3695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:124 after pos.:0  
 M:341 Repeated in SeqNo=124  
 L:3752 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125 after pos.:80  
 L:3894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127 after pos.:0  
 M:341 Repeated in SeqNo=127  
 L:4006 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131 after pos.:128  
 L:4170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137 after pos.:32  
 L:4527 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:146 after pos.:128  
 M:341 Repeated in SeqNo=146  
 L:4780 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:154 after pos.:80  
 M:341 Repeated in SeqNo=154  
 L:4868 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:158 after pos.:32  
 L:4901 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:0  
 M:341 Repeated in SeqNo=159  
 L:5102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:163 after pos.:0  
 M:341 Repeated in SeqNo=163  
 L:5240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:169 after pos.:0  
 M:341 Repeated in SeqNo=169  
 L:5279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:170 after pos.:32

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M:341 Repeated in SeqNo=170

L:5410 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:175 after pos.:32